

63. An article according to claim 62, wherein the third layer is selected from the group consisting of lacquers, polymers, laminated plastic, printing inks or any combination thereof.

64. An article according to claim 54, wherein the at least one surface relief being held by the first layer of non-metallic material comprises a diffracting optical element.

65. An article according to claim 54, wherein the article is part of a container, such as a food or beverage container.--

REMARKS

Claims 36-65 are pending in the present application. Claims 36 and 54 are independent claims.

35 U.S.C. §112, SECOND PARAGRAPH

Claims 9, 17, 18, 28 and 35 have been rejected under 35 U.S.C. §112, second paragraph for various reasons. Although applicants believe that claims 9, 17, 18, 28 and 35, as originally presented are sufficiently definite under 35 U.S.C. §112, second paragraph, applicants have replaced claims 1-35 with new claims 36-65, rendering the Examiner's rejection of claims 9, 17, 18, 28 and 35 moot.

35 U.S.C. §102(b) MIEKKA REJECTION

Claims 1-27, 29-31 and 33-34 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 4,913,858 to Miekka. This rejection is moot in light of the cancellation of claims 1-27, 29-31 and 33-34, and inapplicable to any of presently pending claims 36-65, for at least the reasons set forth above.

New independent claim 36 specifies that the metal substrate holding the first layer of non-metallic material is a bearing metal substrate. The term “bearing” means that the metal substrate is capable of carrying the non-metallic layer in case the metal substrate was the only structure beside the non-metallic layer. In other words, the “bearing” metal substrate is a substrate which on its own is capable of providing the necessary mechanical support for the non-metallic layer.

Applicants respectfully submit the basis for this feature of independent claim 36 may be found in at least figures 8 and 9 of the present application where the metal substrate 1 is shown as the only structure supporting the non-metallic layer 2. Further, on page 3, last paragraph of the present specification, the maximum thickness of the non-metallic layer has been specified to be 50 μm . Such a thickness requires the non-metallic layer to be provided with at least some kind of mechanical support in order not to collapse; in the present application, the mechanical support is provided by the metal substrate.

Furthermore, it is important to note that the Applicants deliberately distinguish between a metal substrate and a metal layer. For example, as mentioned on page 6, second paragraph, "the metal substrate may hold a colour print" and indirectly "the metal substrate ...forms an integral part of a container, such as a food container". In addition to this, see page 8, third paragraph, "preferably, the substrate is metal, such as aluminum or tinfoil". It is well-known in the field that, for example, tinfoil is not commercially available in thickness' smaller than 120-150 μm . Thus, on various places in the description there are clear indications that the metal substrate is a bearing metal substrate.

On the contrary, the metal layer mentioned on page 5, first paragraph, may be made of silver, gold and titanium dioxide, i.e., materials nobody will ever use in attempts to make bearing metal substrates.

Thus, in independent claim 36, it has been made clear that the non-metallic layer is provided onto a bearing metal substrate prior to pressing the object into the non-metallic layer. Thus, the at least one surface relief is replicated in a non-metallic material while the non-metallic layer is being held by the bearing metal substrate. In this way the metal substrate functions as a carrier substrate.

Miekka does not teach a method of replicating a surface relief in a non-metallic layer which is held by a metal substrate. The substrate carrier in Miekka is a paper sheet (see column 3, lines 56-61). Miekka also does not

point a skilled person in the art in the direction of replacing the substrate carrier of paper sheet as substrate material with a bearing metal substrate.

Accordingly, applicants respectfully submit that new independent claim 36 is novel and non-obvious in view of Miekka.

New independent claim 54 recites that the first layer of non-metallic material is integrated with, and thereby not separable from, the bearing metal substrate. This means that the at least one surface relief being held by the non-metallic layer forms an integral part of the article and will therefore also form an integral part of a product including an article according to independent 54.

Basis for independent claim 54 may be found in the present specification at page 8, lines 5-7.

Miekka does not disclose a bearing metal substrate carrying an integrated non-metallic layer holding at least one surface relief. Miekka also does not point a skilled person in the art in the direction of an article carrying an integrated non-metallic layer holding at least one surface relief.

Accordingly, applicants respectfully submit that new independent claim 54 is also novel and unobvious in view of Miekka.

Applicants respectfully submit that dependent claim 37-53 and 55-65 are allowable by virtue of their dependency on allowable independent claims 36 or 54, respectfully, for at least the reasons set forth above.

35 U.S.C. §103(a) MIEKKA/ADMITTED PRIOR ART REJECTION

Claims 28, 32 and 35 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Miekka in view of applicants admitted prior art. Applicants respectfully submit that this rejection is moot due to the cancellation of claims 28, 32, and 35 and further inapplicable to any of the presently pending claims, since the admitted prior art fails to make up for the deficiencies identified above with respect to Miekka.

CONCLUSION

In view of the above amendments and remarks, reconsideration of the various rejections and allowance of claims 36-65 is respectfully requested.

Should the Examiner have any questions concerning this application, the Examiner is invited to contact John A. Castellano (Reg. No. 35, 094) at (703) 205-8000 in the Washington, D.C. area.

Pursuant to the provisions of 37 C.F.R. 1.17 and 1.136(a), Applicants hereby petition for an extension of three (3) months from March 19, 2001 to June 19, 2001 in which to file a response to the outstanding Office Action. The required fee of \$890.00 is attached hereto.

Appln. No.: 09/471,393

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By: 

John A. Castellano
Reg. No. 35,094

P.O. Box 747
Falls Church, Virginia 22040-0747
(703) 205-8000

JAC/cb

Appln. No.: 09/471,393

VERSION SHOWING CHANGES MADE

IN THE CLAIMS

Claims 1-35 have been cancelled.

Claims 36-65 have been added.